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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,402	02/20/2007	Daniel Bell	13353.0028USWO	3761
23552 7590 01/07/2011 MERCHANT & GOULD PC			EXAMINER	
P.O. BOX 2903		EGWIM, KELECHI CHIDI		
MINNEAPOLIS, MN 55402-0903			ART UNIT	PAPER NUMBER
			1762	
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			01/07/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/575,402	BELL ET AL.			
Office Action Summary	Examiner	Art Unit			
	Dr. Kelechi C. Egwim	1762			
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO 136(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
1) ☐ Responsive to communication(s) filed on <u>08 f</u> 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This action is <b>FINAL</b> . 2b) ☐ This application is in condition for allower closed in accordance with the practice under	s action is non-final. ance except for formal matters, pr				
Disposition of Claims					
4) ☐ Claim(s) 50,52-54,56-61,63,65-78,80-82 and 4a) Of the above claim(s) 61,63,65-78,80-82 a  5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 50,52-54 and 56-60 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	and 84-98 is/are withdrawn from c				
Application Papers					
9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) accomposed and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examination is objected.	cepted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list	its have been received. Its have been received in Applicatority documents have been receivau (PCT Rule 17.2(a)).	tion No ed in this National Stage			
Attachment(s)  1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D	oate			
1) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:					

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## **DETAILED ACTION**

## Election/Restrictions

1. Applicant's election with traverse of the polymer article in the reply filed on 11/08/2010 is acknowledged. The traversal is on the ground(s) that the article is not anticipated by the prior art. This is not found persuasive because, as demonstrated below, Claim 50 is anticipated by, or at least obvious over several prior art.

Consequently, the special technical feature which links the claims, the polymer article, still does not provide a contribution to the prior art, so unity of invention is lacking.

The requirement is still deemed proper and is therefore made FINAL.

- 2. Claims 78, 80-82 and 84-98 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.
- 3. Newly amended claims 61, 63 and 65-77 are also directed to an invention that is independent or distinct from the elected the polymer article for the following reasons:

  These claims read on a method of preparing a composite. As unity of invention is lacking and the search for the elected article does not require the search for the particulars of this process, restriction is proper.

Accordingly, claims 61, 63 and 65-77 are also withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

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## Claim Rejections - 35 USC § 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 50, 52-54 and 56-60 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, 35 U.S.C. 103(a) as being unpatentable over Philips (USPN 4,471,009), Sakamoto et al. (USPN 5,006,589), Siddiqui (USPN 5,132,356), Fujimoto et al. (USPN 5,318,833) or Scarlette (USPN 6,399,689).

Each of Philips (col. 2, lines 65-67 and col. 4, line 63 to col. 5, line 12), Sakamoto et al. (abstract), Siddiqui (abstract and col. 3, lines 3-12), Fujimoto et al. (abstract) and Scarlette (col. 1,lines 14-16, col. 2, line 66 to col. 3, line 5) individually teach polymer articles comprising a thermosetting polyester or polyurethane matrix polymer and inorganic particulate material having average particle sizes with the claimed, at a particle loading within the claimed range, based on the total weight of the polymer and inorganic material components.

While the prior art do not specifically discuss gas bubbles and interparticle distance, in page 3, lines 5-9 of the present specification, applicant describes that "by using particles within the above range and at a loading less than the upper limit of particle loading, particulate material can be mixed into the polymer in a mixing regime which ensures no agglomeration of the particles within the polymer matrix and even dispersion of the particles throughout the polymer matrix and substantially no air or gas bubbles in the article."

Thus, it is reasonable that the articles of Philips, Sakamoto et al., Siddiqui, Fujimoto et al. and Scarlette would possess the presently claimed properties since each uses particles within the claimed range and at a loading less than the claimed upper limit of particle loading. The articles in the cited prior art are essentially the same as the claimed article and the USPTO does not have at its disposal the tools or facilities deemed necessary to make physical determinations of the sort. In any event, an otherwise old composition is not patentable regardless of any new or unexpected properties. In re Fitzgerald et al , 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112 - § 2112.02.

Even if assuming that the prior art references do not meet the requirements of 35 U.S.C. 102, it would still have been obvious to one of ordinary skill in the art, at the time the invention was made, to arrive at the same inventive composition because the disclosure of the inventive subject matter appears within the generic disclosure of the prior art.

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7. The following prior art made of record, though not relied upon, are considered pertinent to applicant's disclosure: USPN 6,849,325, USPN 7,297,375, USPN 4,877,819 and USPN 6,046,267.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kelechi C. Egwim whose telephone number is (571) 272-1099. The examiner can normally be reached on M-T (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dr. Kelechi C. Egwim/ Primary Examiner, Art Unit 1762